

**MECHANISM AND METHOD FOR REDUCING PIPELINE STALLS
BETWEEN CONDITIONAL BRANCHES AND DIGITAL SIGNAL
PROCESSOR INCORPORATING THE SAME**

ABSTRACT OF THE DISCLOSURE

For use in a wide-issue pipelined processor, a mechanism for, and method of, reducing pipeline stalls between conditional branches and a digital signal processor (DSP) incorporating the mechanism or the method. In one embodiment, the mechanism includes: (1) a mispredict program counter (PC) generator that generates a mispredict PC value for each conditional branch instruction in a pipeline of the processor and (2) mispredict PC storage, coupled to the mispredict PC generator, that stores the mispredict PC value at least until a resolution of the conditional branch instruction occurs and makes the mispredict PC value available to a PC of the processor if the resolution results in a mispredict condition.